

Memorandum

To: Honorable Jerome E. Horton, Chairman
Honorable Michelle Steel, Vice Chair
Honorable Betty T. Yee, First District
Senator George Runner (Ret.), Second District
Honorable John Chiang, State Controller

Date: February 12, 2014

From: Joe Fitz, Chief
Research and Statistics Section

Subject: **FUEL TAX SWAP
FEBRUARY 2014 – BOARD MEETING**

Motor Vehicle Fuel. Current law (Revenue and Taxation Code sections 6357.7 and 7360, commonly referred to as the "fuel tax swap") requires the Board of Equalization (Board) to adjust the excise tax rate for motor vehicle fuel (MVF) on an annual basis. Specifically, the fuel tax swap eliminated the General Fund portion of the sales and use tax on MVF and raised the excise tax rate with the intent of keeping revenue at the same level as before the swap (revenue neutrality). When the fuel tax swap was enacted, the legislation set the excise rate on MVF at \$0.353 cents per gallon for 2010-11, and required the Board to ensure ongoing revenue neutrality by annually adjusting the excise tax rate by March 1.

The calculation requires that staff forecast both consumption and price of MVF for the coming fiscal year. Staff has adopted the quarterly MVF consumption forecast prepared by the Department of Finance (DOF) for its January 10, 2014-15 budget proposal. Consumption of MVF changes relatively slowly in the short-term, and DOF's forecast appears to be reasonable. However, staff's forecast of MVF price incorporates data not available to DOF when its budget forecast was prepared. Specifically, the macroeconomic forecasting firm, IHS Global Insight, indicates a very modest decrease in gasoline price since the time that DOF prepared its forecast, and staff has incorporated this decrease into its MVF price forecast.

To project the General Fund portion of foregone sales and use tax revenues for 2014-15, staff multiplies forecasted consumption by price, and multiplies the product of that calculation by 5%. Staff's forecast indicates that the General Fund portion of foregone sales and use tax revenues for 2014-15 is \$2.388 billion. To maintain revenue neutrality, the law requires staff to look back two years and adjust the difference between the 2012-13 projected and actual foregone sales tax on MVF. Staff divides the difference by the number of gallons consumed in that year to arrive at the true-up portion of the excise tax rate. When both the forecast and true-up calculations are combined, staff calculates that the revenue-neutral excise tax rate for 2014-15 is \$0.36 per gallon.

Thus, staff recommends that the Board set the excise tax rate on MVF for the period July 1, 2014 through June 30, 2015 at \$0.36 per gallon, a decrease of \$0.035 from the current rate of \$0.395.

Diesel Fuel. Current law (Revenue and Taxation Code 6051.8, 6201.8 and 60050, ("fuel tax swap") increases the sales and use tax imposed on diesel fuel by 1.75 percentage points in 2014-15, and requires the Board to adjust the excise tax rate on diesel to ensure that the revenue remains at the same level as before the fuel tax swap.

Based on forecasts for both the price and consumption of diesel fuel, staff project that the revenue gain would be \$156 million. Staff calculates that an excise tax rate of \$0.11 per gallon would lead to an equivalent revenue loss that would offset the additional sales tax rate on diesel.

Thus, staff recommends that the Board set the excise tax rate on diesel fuel for the period July 1, 2014 through June 30, 2015 at \$0.11 per gallon, an increase of \$0.01 from the current rate of \$0.10.


See Attachment 1 for a more detailed description of fuel tax swap for gasoline and diesel.

JF:bb:jm

Attachment

cc: Mr. David Gau
Mr. Jeff McGuire
Ms. Michele Pielsticker
Ms. Joann Richmond
Ms. Debbie Kalfsbeek
Ms. Susanne Buehler

Recommendation by:



Joe Fitz, Chief
Research and Statistics Section

Approved:



Cynthia Bridges
Executive Director

Approved:

Joann Richmond, Chief
Board Proceedings Division

BOARD APPROVED

at the _____ Board Meeting

Attachment 1

Calculations Used to Adjust the 2014-15 Gas Tax Swap Rate

Summary. Our calculations indicate a 3.5 cent reduction in the excise tax rate for gasoline for fiscal year 2014-15. Details are provided below and in the table on the following page.

Conceptual Background. The fuel tax swap annually requires Board of Equalization (BOE) to set an excise tax rate per gallon of gasoline that provides the same amount of revenue as would the state sales and use tax, which was eliminated and replaced by the excise tax under the fuel tax swap legislation enacted in 2010. The Legislature intended that the revenues collected under the fuel tax swap stay at the same level as they would have been had the Sales and Use Tax on fuel stayed in place. In other words, the legislation was intended to ensure revenue neutrality over time.

To accomplish revenue neutrality, the BOE is required to adjust the excise tax rate annually. As part of this adjustment, the BOE compares the difference between the revenues it forecasted the sales and use tax would have yielded in Fiscal Year 2012-13 without the excise tax, and the actual excise tax revenues generated ("true-up"). The difference between the two must be neutralized to remain even by adjusting the excise tax rate up or down. The BOE, in cooperation with the Department of Finance, forecasts the amount of revenue that would have been received under the sales and use tax law for fiscal year (2014-15). The BOE adjusts the excise tax rate up or down to ensure revenues collected in this year are consistent with this forecast

The excise tax rate is imposed as a flat rate per gallon, while the sales and use tax rate is imposed as a percentage of the gasoline price. Thus, calculating the true-up for Fiscal Year 2012-13 and generating the forecast for Fiscal Year 2014-15, requires analyzing the amount that taxpayers actually consumed, as well as the amount they are predicted to consume and multiplying that number by the average price for each relevant time period.

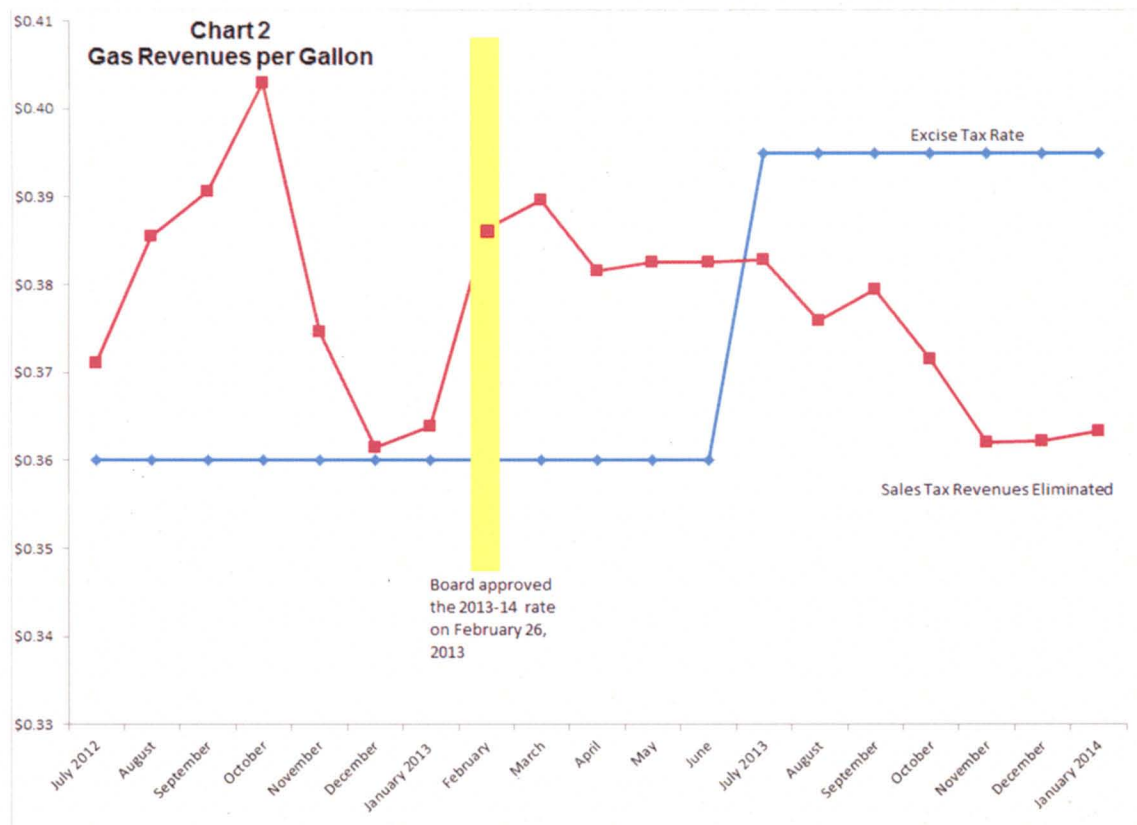
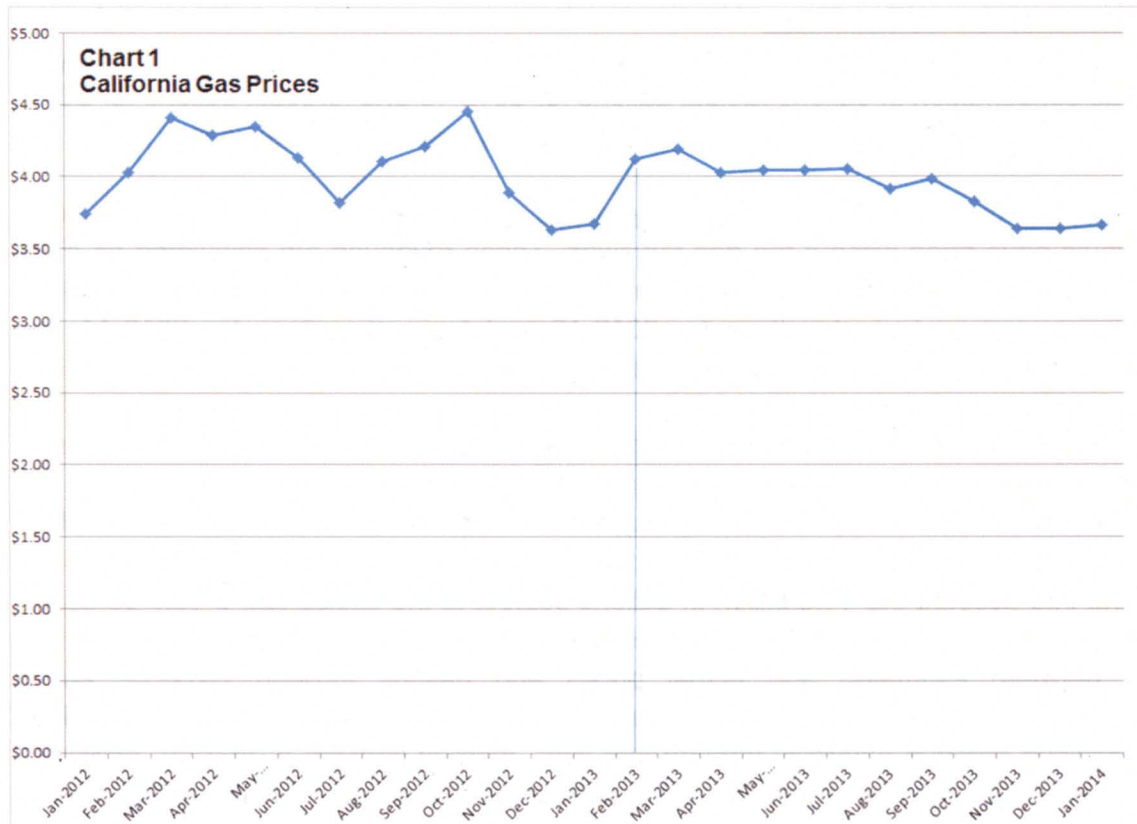
Table 1 Summary of Preliminary 2014-15 Gas Tax Swap Calculations (Dollars In Millions, except as noted)			
	Fiscal Year		
	2012-13	2013-14	2014-15
Gas Excise Tax Rate Calculations			
Estimated Gallons Purchased (Billions)	14.489	14.392	14.295
New Excise Tax Rate Per Gallon (\$)	0.180	0.215	0.180
Existing Base Rate (\$)	0.180	0.180	0.180
Total Excise Tax Rate (\$)	0.360	0.395	0.360
Difference From Prior Year (\$)	0.003	0.035	(0.035)
Revenue Neutrality for Gas Tax			
Sales Tax Revenues Eliminated (\$ Millions)	\$ 2,652	\$ 2,539	\$ 2,388
New Gas Excise Tax Revenues (\$ Millions)	\$ 2,608	\$ 3,094	\$ 2,576
Difference (\$Million)	\$ (44)	\$ 555	\$ 188
Cumulative Difference (\$Million)	\$ (188)	\$ 367	\$ 555

Fiscal Year-To-Date Comparisons per Gallon. The calculations necessary to adjust the gas tax rate require analysis of both gallons and prices. Data for prices are current, and are available monthly from the U.S. Energy Information Administration. Chart 1 shows monthly California gas prices. Chart 2 shows implied gasoline sales tax revenues per gallon using monthly prices and compares them to the excise tax rates for fiscal year 2012-13 and fiscal year 2013-14 through January.

As shown in Chart 2, sales tax revenues eliminated exceeded the excise tax rate of \$0.36 per gallon every month of the fiscal year in fiscal year 2012-13. The fiscal year 2013-14 rate needed to be above \$0.36 per gallon to make up for the lower excise tax revenues of 2012-13. So far in fiscal year 2013-14, sales tax revenues eliminated have been below the excise tax rate of \$0.395 per gallon. To be revenue neutral, a rate set for 2014-15 would imply that the differences in both 2012-13 and 2013-14 sum to zero. This analysis does not reflect changes in gallons and prior-year differences, which also affect the rate.

Calculations

Data Sources. The California Department of Finance (DOF) provided Research and Statistics staff with actual values and forecasts of gasoline consumption and prices used in the 2014-15 Governor's Budget forecast. California gas prices were adjusted by the ratio of the U.S. gasoline price forecasts from *IHS Global Insight* for February 2014 over December 2013 (The February 2014 forecast figure divided by the December 2013 forecast figure).



Revenues at Actual Excise Tax Rates. We calculated revenues at actual current-law excise tax rates for fiscal years 2011-12 through 2014-15. Revenues are calculated by multiplying California gas consumption in gallons (actual gallons for 2012-13 and forecast gallons for 2013-14 and 2014-15) by current and historical excise tax rates for respective fiscal years.

What Revenues Would Have Been Under the State Sales Tax Rate. We calculate what revenues would have been without the gas tax swap. These revenues are calculated as *if* the excise tax were a sales tax. Revenues are calculated by multiplying gas consumption in gallons by California gas prices (actual gallons for 2012-13 and forecast gallons for 2013-14 and 2014-15) and then applying a state sales tax rate of 5.0 percent¹.

Set a Revenue-Neutral Rate. The table on the next page shows the steps in the calculation of the gasoline excise tax rate for 2014-15. We forecast that prices will average about \$3.38 per gallon (before local sales and state excise taxes), that the state will consume about 14.2 billion gallons of gasoline, and the application of the 5 percent sales tax rate would have raised \$2.388 billion. Taking into account the 14.3 billion in gallons subject to the excise tax, a 16.7 cents per gallon rate is needed to offset the foregone sales tax revenues. In addition, based on differences between estimated and actual prices and gallons through 2012-13, actual collections from the excise tax through that year are \$188 million less than what would be needed to achieve revenue neutrality through that year, thereby creating a “true-up” obligation of a like amount. Offsetting that shortfall would require an additional 1.3 cents per gallon, raising the incremental excise tax to 18.0 cents per gallon. Combined with the previous 18 percent excise tax, total gasoline excise taxes will be 36.0 cents per gallon.

¹ Our interpretation of the fuel tax swap legislation is that we still use a rate of 5.0 percent, even though the state sales tax rate has changed since the fuel tax swap legislation was enacted.

Table 2 Estimated Variable	2014-15
Sales Tax Eliminated	
Average Price	\$3.376
Sales Tax Gallons (millions)	14,151
Sales Tax Rate	5.0%
Total (\$ millions)	\$2,388
New Gas Excise Tax:	
Excise Tax Gallons (millions)	14,295
Rate Needed To Offset Sales Tax Loss in 2014-15	\$0.167
True-up Calculation:	
Cumulative Surplus (+)/Shortfall (-) Through 2012-13 (millions)	-\$188
Amount Per-Gallon (true-up adjustment)	\$0.013
Combined New Excise Tax Rate In 2014-15	\$0.180
Total (New plus prior 18 cent rate)	\$0.360
Adjustment from prior year	-\$0.035

Calculations Used to Adjust the 2014-15 Diesel Tax Swap Rate

Summary. Our calculations indicate a 1.0 cent increase in the excise tax rate for diesel for fiscal year 2014-15. Details are provided below and in the table on the following page.

Conceptual Background. The diesel tax swap is similar to the gas tax swap. Instead of eliminating the excise tax rate as for gasoline, the diesel tax swap includes an additional sales tax rate for diesel that is designed to raise the same amount of revenue as the excise tax rate set prior to FY 2011-12. The Board adjusts the excise tax on diesel downward from \$0.18 per gallon to a revenue-neutral rate. The additional sales and use tax rate on diesel fuel has varied each year through FY 2013-14, when the additional tax rate amounted to 1.94 percent. Beginning in FY 2014-15, the additional diesel fuel tax rate will be 1.75 percent.² The Legislature intended that the revenues raised under the diesel tax swap stay at the same level as they would have been had the excise tax rate on diesel fuel stayed in place. In other words, the legislation was intended to ensure revenue-neutrality over time, the same concept as for the gas tax swap.

Set a Revenue-Neutral Rate. The calculations required to make the diesel tax swap rate to be revenue neutral are similar to those made for gasoline.

The tables on the next two pages show the steps we took to calculate the diesel tax swap for 2014-15. Table 3 shows that we project diesel prices in fiscal year 2014-15 to average \$3.56 per gallon. With about 2.5 billion gallons subject to the added sales tax rate, diesel taxable sales are expected to be about \$8.9 billion.

At a sales tax rate of 1.75 percent, additional revenues are \$156 million. Based on projected purchases of 2.69 billion gallons in fiscal year 2014-15, a corresponding reduction in excise tax revenues results in a per gallon reduction of 5.8 cents. In addition, the true-up or the cumulative difference between sales taxes raised and diesel excise taxes eliminated through 2012-13, is \$21.4 million. (See Table 4.) Assuming purchases of 2.69 billion gallons, the difference results in a true-up reduction of 0.8 cents per gallon, for a combined reduction of 6.6 cents. This rate is then subtracted from \$0.18 per gallon, the excise tax rate prior to fiscal year 2011-12. After this adjustment, the remaining diesel excise tax rate is 11.4 cents, or 11 cents per gallon after rounding.

² Revenue and Taxation Code sections 6051.8 and 6201.8 specify annual sales and use tax rates for diesel.

Table 3 Variable	2014-15
Sales tax increase	
Average price per gallon	\$3.56
Sales tax gallons (billions)	2.510
Statutory increase in sales tax rate	1.75%
Total increase	156
Excise tax reduction:	
Excise tax gallons (billions)	2.693
Rate reduction needed to offset sales tax increase in 2014-15	-\$0.058
True-up calculation for 2012-13	
Cumulative surplus (+)/shortfall (-) through 2012-13 (millions)	-\$21.4
Amount per-gallon (true-up adjustment)	-\$0.008
Total excise tax rate reduction	-\$0.066
Remaining excise tax rate (after rounding)	\$0.110
Change from prior year	\$0.01

Table 4
Diesel Calculations for True-Up
Fiscal Year 2014-15
(Dollar in Millions, except as noted)

	2012-13	2013-14	2014-15
Sales Tax Rate	2.17%	1.94%	1.75%
Gallonage (Billions)	2.41	2.46	2.51
Total Sales	\$8,887	\$8,558	\$8,940
Additional Revenue	\$193	\$166	\$156
Estimated Excise Tax Gallons (billions)	2.59	2.64	2.69
Excise Tax Reduction rate (\$)	\$0.08	\$0.08	\$0.07
Excise Tax Reduction	207.0	211.2	177.9
<i>Excise Tax Rate</i>	<i>\$0.10</i>	<i>\$0.10</i>	<i>\$0.11</i>
Revenue Neutrality for Diesel Tax			
Sales Tax Revenues Increase	\$192.9	\$166.0	\$156.5
Diesel Excise Tax Revenues Eliminated	\$207.0	\$211.2	\$177.9
Difference (\$)	14.1	45.1	21.4
Cumulative Difference (\$)	-21.4	23.7	45.1